

IN THE CLAIMS

The status of the claims is listed below.

Claims 1-68: (Canceled).

69. (Currently Amended) A mammalian non-human female animal having a complete depletion of ovarian primordial follicles and at least one characteristic selected from the group consisting of depletion of ovarian follicles, irregular ovarian cyclicity, cessation of estrous cyclicity, elevated FSH levels, erratic ovarian 17β -estradiol levels, loss of bone mineral density, and reduced ovarian weight, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 720 mg/kg/day.

70. (Currently Amended) The animal of Claim 69, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 200 mg/kg/day for at least 10 days.

71. (Previously Presented) The animal of Claim 69, which is suitable as a model of menopause.

72. (Previously Presented) The animal of Claim 69, which is suitable as a model of perimenopause.

73. (Previously Presented) The animal of Claim 69, which has irregular ovarian cyclicity.

74. (Previously Presented) The animal of Claim 69, which has cessation of estrous cyclicity.

75. (Previously Presented) The animal of Claim 69, which has elevated FSH levels.

76. (Previously Presented) The animal of Claim 69, which has erratic ovarian 17β -estradiol levels.

77. (Previously Presented) The animal of Claim 69, which has loss of bone mineral density.

78. (Previously Presented) The animal of Claim 69, which has reduced ovarian weight.

79. (Previously Presented) The animal of Claim 69, which is a mouse.

80. (Previously Presented) The animal of Claim 69, which is a rat.

81. (Previously Presented) The animal of Claim 69, which is a primate.

82. (Previously Presented) The animal of Claim 69, which is a canine.

83. (Currently Amended) A method of preparing the animal of Claim 69, comprising administering to the animal 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 700 mg/kg/day, to produce a complete depletion of ovarian primordial follicles and at least one characteristic selected from the group consisting of depletion of ovarian follicles, irregular ovarian cyclicity, cessation of estrous cyclicity, elevated FSH levels, erratic ovarian 17 β -estradiol levels, loss of bone mineral density, and reduced ovarian weight.

84. (Previously Presented) The method of Claim 83, wherein the 4-vinylcyclohexene diepoxide is administered intraperitoneally (i.p.), subcutaneously (s.c.), or by an implantable device.

85. (Previously Presented) The method of Claim 83, wherein the 4-vinylcyclohexene diepoxide is administered to the animal for at least 10 days.

86. (Currently Amended) A method of inducing ovarian failure in a mammalian non-human female animal other than a mouse or a rat, comprising administering to the animal 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 720 mg/kg/day, to cause ovarian failure in the animal.

87. (Previously Presented) The method of Claim 86, wherein the animal is a canine.

88. (Previously Presented) The method of Claim 86, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 250 mg/kg/day.

89. (Previously Presented) The method of Claim 86, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 250 mg/kg/day for at least 10 days.

90. (Previously Presented) The method of Claim 86, wherein the animal is selected from the group consisting of cats, hamsters, ferrets, rabbits, sheep, cattle, horses, pigs, deer, elk, moose, bears, goats, monkeys, and wild felines.

91. (Currently Amended) A method of controlling the size of a mammalian non-human animal population, comprising administering 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 720 mg/kg/day, to cause at least partial ovarian failure in at least a portion of the female members of the animal population and control the size of the population.

92. (Previously Presented) The method of Claim 91, wherein the animal is selected from the group consisting of dogs, cats, hamsters, ferrets, rabbits, sheep, cattle, horses, pigs, deer, elk, moose, bears, goats, monkeys, and wild felines.

93. (Previously Presented) The method of Claim 91, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 250 mg/kg/day.

94. (Previously Presented) The method of Claim 91, wherein the animal has been administered 4-vinylcyclohexene diepoxide at a dosage of ~~at least~~ 100 mg/kg/day to 250 mg/kg/day for at least 10 days.

95. (New) The method of Claim 69, wherein the VCD is administered at a dosage of 100 mg/kg/day to 500 mg/kg/day.

96. (New) The method of Claim 69, wherein the VCD is administered at a dosage of 100 mg/kg/day to 250 mg/kg/day.

97. (New) The method of Claim 69, wherein the VCD is administered at a dosage of 100 mg/kg/day to 160 mg/kg/day.

98. (New) The method of Claim 86, wherein the VCD is administered at a dosage of 100 mg/kg/day to 500 mg/kg/day.

99. (New) The method of Claim 86, wherein the VCD is administered at a dosage of 100 mg/kg/day to 250 mg/kg/day.

100. (New) The method of Claim 86, wherein the VCD is administered at a dosage of 100 mg/kg/day to 160 mg/kg/day.

101. (New) The method of Claim 91, wherein the VCD is administered at a dosage of 100 mg/kg/day to 500 mg/kg/day.

102. (New) The method of Claim 91, wherein the VCD is administered at a dosage of 100 mg/kg/day to 250 mg/kg/day.

103. (New) The method of Claim 91, wherein the VCD is administered at a dosage of 100 mg/kg/day to 160 mg/kg/day.